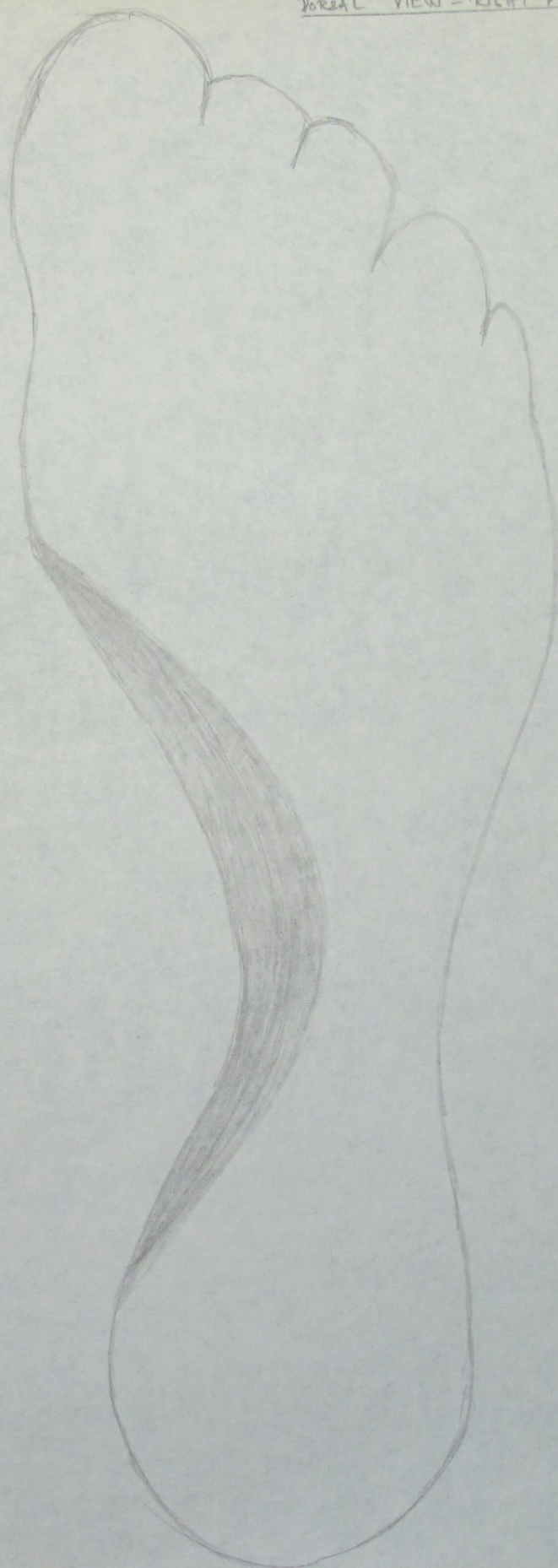
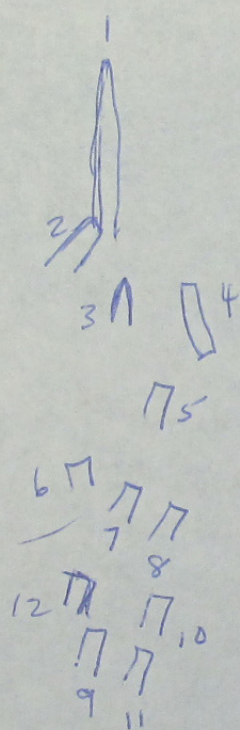


DORSAL VIEW - RIGHT FOOT









## Bands of fascia

Med. side.

- Laciniate lig. (Flex. retinaculum.)
- Int. & Peroneal retinacula.
- Up of foot. Extensor retinaculum

## Joints of Foot.

Tal. - calcaneo. (gliding).)

Inter-tarsal lig.

- Press down block. in order.
- prevents talus from slipping forward enables heel to rest evenly

Med. tarsal jt. (inversion & eversion)

Tal. - calcaneal. Tal. navicular.

Navicular - cuboid.

Spring lig.

- (calc.)
- sustentaculum tali & anteriority of talus navicular upper border - blends deltoid lig.
- elastic.
- maintains round bed of talus is held by tendon of tib. post.

Long plantar lig.

- from plantar surface of calcaneum to anteriority on cuboid & to bases of 2nd, 3rd & 4th tarsal metatarsals
- maintains long arch of foot.

● Short plantar lig.

- lies under long p. lig.
- from ant. tubercle of calcaneum to cuboid. holds up lat. tubercle arch



## Ligaments

Across tarsal bones & inter-osseous lig.

Transverse - heads of metatarsals.

- transverse arch.

Joints - tarsals & metatarsals

gliding.

Met & phalanges - condyloid

Applied Anatomy - Dislocation involving talus.

On chronic arthritis - head of talus removed.

## Arches.

2 longitudinal arches. 1-2-3 m.

Medial - high lateral - low.

Navicular - keystone of arch.

3 supports.

1. Interssegmental. - lig. on plantar side strong. Long plantar & spring lig.

2. Pillars tied together by muscles & fascia. Abductor hallucis

Tibialis Post.

Tendon flexor hallucis longus

" " " " " " " " " " " "

Plantar aponeurosis.

3. Stick to maintain highest pt.

Expansion of tendon Tibialis ant.

## Anterior longitudinal arch

Arch. Calcaneum & 4<sup>th</sup> to 5<sup>th</sup> metatarsals.

Keystone - cuboid

Arch lower.

Long & short plantar lig. interssegmental



● Planter spurs.  
Peroneus longus.  
Muscles of 5<sup>th</sup> toe.  
Flexor digitorum longus.

3. Peroneus longus.

Memoranda - Whistles post. Peroneus longus.  
Adductor hallucis.

P. 303-304.

Planter fascia -  
Centre - calcaneum behind.  
Dist & heads of metatarsals.

● Lower Extremity.

Inner limb - stability.

- spine & pelvis bear wt. of head, trunk & arms.

Pelvis - wt. transmitted.

2. ilj - acetabulum - femur. (oblique)

tibia, talus & calcaneum.

- Pubis - no wt.

Wt. behind centre of hip jt.  
in front centre of knee jt.

(Jan 20)



## Lumbar Plexus.

12 thoracic.  
lumbar 1-2-3-4.

4 Cutaneous Nerves. } <sup>abdomen</sup>  
1. Ilio - Hypogastric. } + genitalia.  
2. Ilio - Inguinal. } 12 thoracic, 1st lumbar  
3. Genito - Femoral } lumbar 1 + 2.  
Cutaneous to lower abdomen + external  
genitalia. } <sub>lumb-  
inguinal</sub>

4. Iliac Femoral Cutaneous N. lumbar 1-2-3.  
Cutaneous to lateral side of thigh.

Femoral - lumbar 2-3-4.

Descends through psoas major muscle.  
round brim of pubis - enters leg under  
inguinal lig.

Supply - Psoas + Iliacus. (~~thigh~~ abdomen).

In thigh - supplies pectineus, sartorius,  
quadriceps.

- supplies skin in front of  
medial side of thigh.

- terminal branch - medial side  
of leg + foot. (saphenous)  
(whole medial side of leg + foot)

Obturator nerve - lumbar 4-2-3-4.

- medial side of psoas, round  
brim of pubis, upper part of  
adductor foramen.

Supply - adductor muscle - except  
pubis + ischial fibres of  
adductor magnus + pectineus.



Synovial membrane - delicate + thin.  
- secretes fluid for lubrication.

## Joint movement

Flexion - bending of the joint.

1) forward movement, with  
exception of knee which is  
reversed & thumb which flexes  
across palm.

2) Plantar flexion at the ankle,  
rising on the toes.

Muscles of flexion - flexors.

Extension - muscles, extensors.

- at the ankle, dorsi-flexion.

A joint with only these 2 movements  
is a hinge joint.

Elbow, fingers, knee, ankle.

Abduction - movement away from mid-line.

Adduction - towards mid-line of body.

Circumduction - sequence of these 4 movements.

Joint of these 4 movements is a  
condylar joint (round head fitting a hollow.)

## Ball & socket joint

Has all preceding movements plus  
axial rotation.

Rotation - turning of limb on its long axis,  
- called medial rotation if foot  
turns medially.

- lateral rotation if foot turns laterally.

Muscles - lateral & medial rotators.

Ab - away

Ad - towards.



Fingers - line is mid finger.

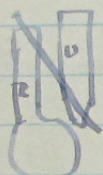
Dist - " " " second toe.

Pronation - movement of radius carrying the hand from anatomical position, to turning the palm posterior.

Supination - reverse - anatomical position.

Muscles called pronators & supinators.

Axis of movement is through the heads of radius + ulna.



In a hinge joint the axis is transverse.

" " condylrod the axis is antero posterior.

" " ball & socket joint axis is longitudinal.

Hinge joints - elbow.

- strongest ligaments at the side.

Condylrod - ligaments mostly at the sides, not so heavy as a hinge joint, slack enough for ab & adduction.

Ball & socket - shoulder - ligaments lax, movement at shoulder free.

Capsule is loose, ligaments not strong, but muscles hold joint in place.

At hip joint - ligaments strong at front, because weight line falls behind joint. ligaments same muscles work.

At knee - wt. line falls in front. ∴ strong ligaments prevent over-extension.

Thumb - saddle joint between 1<sup>st</sup> metacarpal & the carpal. Both surfaces are convex in one direction & concave in the other direction.

Saddle joint has same movements as



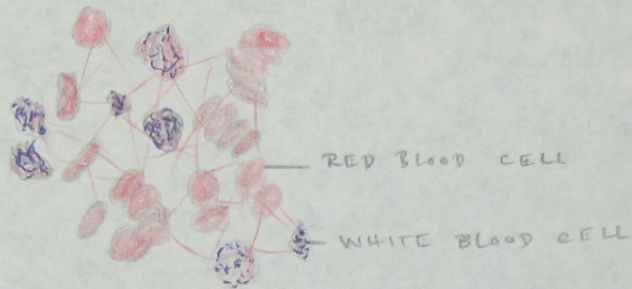
P. HAMILTON.

HEALTH I

LAB. III



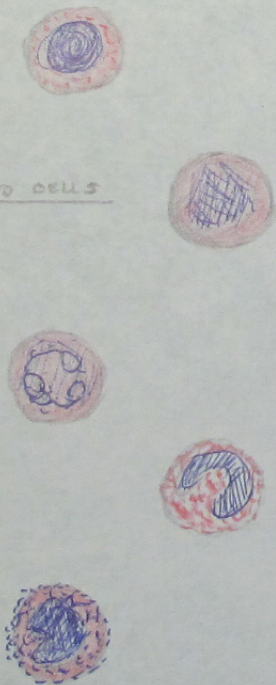
Blood Cells



RED BLOOD CELLS



WHITE BLOOD CELLS







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